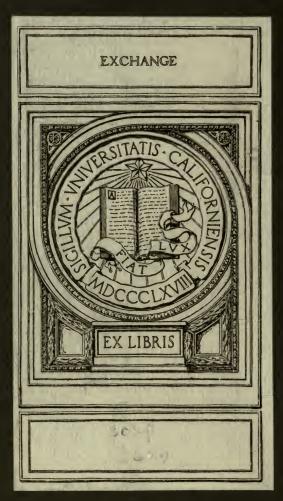
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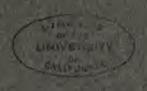




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AN INVESTIGATION

to Determine the Efficiency with which the Compulsory Attendance Law is Enforced IN PHILADELPHIA



THESIS

PRESENTED TO THE FACULTY OF THE GRADUATE SCHOOL OF THE UNIVER-SITY OF PENNSYLVANIA IN PARTIAL FULFILLMENT OF THE REQUIRE-MENTS FOR THE DEGREE OF DOCTOR OF PHILOSOPHY

BY

EDWARD CLINTON BIXLER

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UNIV. OF California



CHAPTER I.

COMPULSORY EDUCATION IN THE UNITED STATES

Modern compulsory education has its origin in the desire for universal education at the time that the State was beginning to assume the function of educating the people. The reformers everywhere aimed to perpetuate their faith by educating the people. "The keynote of this attempt was struck by Luther in his address to the councilmen of all the towns of Germany, in 1524. He argued that, if a ruler can compel military service of his subjects, he can also compel the children to attend school as both are for the defence and welfare of the counry." "Calvin, at Geneva, as far as possible, made education obligatory. By the close of the sixteenth century the principle of compulsory education had become an essential part of the educational creed of Protestant Germany, and, spreading through other Protestant countries, soon came to be an accomplished fact in some. Holland attained a higher standard than could be found anywhere. All, even the lowest classes, could read and write."

From Holland and England the movement spread to America. The early New England settlers were educated and in sympathy with the movement for universal education. "The Massachusetts' law of 1642 was a public assertion of the right of the State to educate the child in default of the parent to do his own duty. The Massachusetts' general court authorized its officials to look into the homes of the people and to unmask parental greed, neglect and abuse; it even asserted supreme authority to take the child from its parents and educate it at the public expense." The Connecticut Colony, in 1650. and the New Haven Colony, in 1655, passed laws containing a provision for obligatory education. These laws were sufficient for their time. "Their successful administration was due primarily to the favorable conditions under which they were established. The people were homogeneous and well-to-do. They were intelligent and industrious."† This condition of affairs existed for almost two hundred years until immigration, manufacturing and wealth broke up the form-

^{*}Painter, Luther on Education.

[†]Perrin, History of Compulsory Education in New England.

[‡]Annual Report of the United States Commissioner of Education, 1893-94, V. 1, 663.

erly homogeneous people into classes, and the public schools were losing their efficiency, and the system its vitality. "The concentration of the population in the manufacturing and railroad centres aggravated the evil. There was less home-work for the children, less opportunity for parental oversight and control and stronger street temptations. So absenteeism and truancy increased. Thousands of children were brought into the States from England, Ireland and Scotland, where education was at its lowest ebb—children who had never seen inside a schoolroom."*

Massachusetts was the first State to direct legislation to the schools to remedy this evil. In 1850 a truant law was passed, followed by a compulsory attendance law in 1852. "This law, like many of the earlier laws of compulsory attendance, attracted little attention, and there is no account of its enforcement, even in the State reports."† This law was strengthened by additional acts and amendments, especially in 1873 and 1889, so that the towns were not only requested but compelled to make provision for the execution of the law.

Since the passage of the Massachusetts' law, other states have directed their attention to prohibiting children from being imposed

TABLE I.—PROGRESS OF THE ADOPTION OF COMPULSORY SCHOOL ATTENDANCE LAWS.

Year	Number of States and Territories having com- pulsory school attend- ance laws.	Population un- der compulsory school attend- ance laws.	Population of the United States.	Per cent. under compulsory school attendance laws.
1870	3	1,919,602	38,558,371	4.98
1875	16	13,412,462	43,700,554	30.69
1880	17	18,414,631	50,155,783	36.72
1885	23	25,898,527	56,221,868	46.06
1890	28	30,920,711	62,622,250	49.38
1895	29	39,970,360	68,748,950	58.14
1900	32	49,394,291	75,994,575	65.00
1905	35 -	\$60,156,526	82,584,061	72.84

†This includes an estimated population of 692,600 subject to compulsory school attendance laws in certain counties and cities in Maryland, North Carolina and Tennessee.

upon by greedy, ignorant and lazy parents who would put them to work at a very early age. Now thirty-seven states and territories

^{*}Martin, Evolution of the Massachusetts Public School System.

[†]Annual Report of the United States Commissioner of Education, 1888-89, V. 1, 471 sq.

with the District of Columbia and three states in part, including over seventy per cent of the people of the United States, are under such laws, more or less vigorously enforced. Table I shows the number of states and territories and people where compulsory attendance laws exist, and the population of the United States at the periods named, as given by the United States Commissioner of Education, Report for 1906, V. 2, page 1267.

With this spread of compulsory school attendance laws, the question may arise as to what influence they have had upon the enrollment and attendance, both in the United States and in the states having such laws in comparison with those that have not or that have passed them so recently that no satisfactory comparisons can be made. The irregular line in Chart I shows the school enrollment of the United States for every year from 1870-71 to 1906-07. In 1899-00, 20.51 per cent of the people in the United States were enrolled in the schools. A broken line has been drawn to show how many children ought to have been in school in the census years 1880, 1890 and 1900 and 1907 (estimated), if the same per cent of the people had been in school as were enrolled in 1899-00. Since the broken line shows the increase in enrollment based on a corresponding increase in population, the amount of difference, in numbers, between such an increase and the actual enrollment represented by the irregular line can easily be seen.

In Chart II is shown the per cent of the population enrolled in the United States, its five divisions and Pennsylvania, at the periods noted on the chart. The divisions are those used by the Census Bureau and by the United States Commissioner of Education. The chart shows the rapid increase in enrollment in the South Atlantic and South Central Divisions where compulsory attendance laws are not in force, except in a few states. The North Atlantic and North Central Divisions show a steady decline in the per cent of enrollment, and in these divisions every state has had a compulsory attendance law for, at least, ten years. The Western Division gives the best record under compulsory attendance laws, and is the only division which shows no decline since 1900. Possibly the comparison between the South Atlantic and South Central Divisions and the others is not just for the first two decades in question because of the reconstruction of their public school systems during the Seventies, and the help given from outside sources.

CHART I.—Number of Pupils Enrolled in the Puplic Schools OF THE UNITED STATES

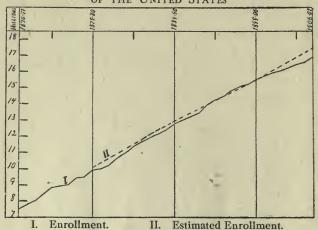
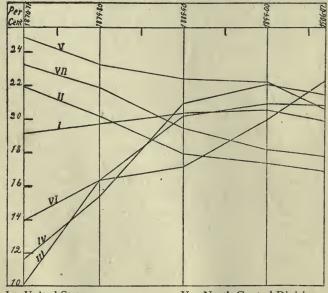


CHART II .- PER CENT OF THE POPULATION ENROLLED IN THE PUBLIC SCHOOLS



- United States.
- North Atlantic Division. II.
- South Atlantic Division. South Central Division. III.
- IV.
- V. North Central Division.
- VI. Western Division.
- VII. Pennsylvania.

Chart II is misleading in showing any effect of compulsory attendance laws that tended to an increase in enrollment, if the effect of the law is to be judged from that standpoint. It does show that in 1907 the states were educating less children, according to population, than in 1900. While this decrease is not satisfactorily explained by the rapid rise in adult immigration, it may be, in part, due to the failure of increased school accommodations to keep pace with the rapid growth of school population. There is, at least, room for doubt that the estimated decrease is due to less efficient administration of compulsory attendance laws.

The question may arise whether there are relatively as many of the children in school today as ten or twenty years ago. This can be tested for the census years only. A comparison of the last three censuses will be adequate to the purpose. According to the census of 1880, 34.3 per cent of the population was 5 to 19 years inclusive. In 1879-80, 19.67 per cent of the population and 57.3 per cent of the children 5 to 19 years inclusive were enrolled in the public schools. In 1890 the per cent of children 5 to 19 years inclusive had decreased to 33.8 per cent of the population. The enrollment for 1889-90 had increased to 20.32 per cent of the population and to 60.1 per cent of the children 5 to 19 years inclusive. In 1900 the per cent of children 5 to 19 years inclusive had decreased to 32.3 per cent of the population. The enrollment for 1899-00 had increased to 20.51 per cent of the population and to 63.5 per cent of the children 5 to 19 years inclusive. These figures, which are the only ones upon which any just and accurate conclusion can be based, show an increase in enrollment, in proportion to the population of school age, for the whole period, which is steady for the census years. It is not possible to say whether a decrease in the number of children 5 to 19 years inclusive, in proportion to the population, explains the steady decrease in the per cent of population enrolled during the years since the last census, although this seems to be a plausible explanation. But since no rate of decrease in the per cent of children 5 to 19 years inclusive can be established with any degree of accuracy, and any estimation of the proportion of such children enrolled could therefore not be expressed in figures, with safety, all conclusions as to the probable number or per cent are indeterminable.

Chart III shows the per cent of the population 5 to 18 years enrolled in school, for the United States, its divisions and Pennsylvania, at the periods noted on the chart, from figures based on the Report of the United States Commissioner of Education, 1907, V. II, page 549. In considering the charts of this chapter it must be held in mind that almost all the states of the South Atlantic and South Central Divisions have no compulsory attendance laws. For the period 1899-00 to 1906-07 this chart does not present a very favorable record for any division except the Western. No explanation for this can be given, unless, as stated above, the next census may reveal a much lower number of children 5 to 19 years inclusive or 5 to 18 years, in proportion to population, or show that the private schools are increasing in numbers. The school censuses of the states ought to give some basis for proving the possible correctness of the figures given above. Some divisions show a lower per cent of the number of children 5 to 18 years enrolled in 1906-07 than they did in 1870-71. This is true of Pennsylvania which shows a steady decline since 1871.

Since it is both of interest and importance for the problem under consideration to find out what opportunities are offered to the children to obtain an education as well as to show what has actually been accomplished in numbers, the length of the school year has been indicated on a chart, from figures based on the Report of the United States Commissioner of Education, 1907, V. II. page 553. If the school year is lengthened, there may be a tendency to drop out earlier. The children may become tired of school or the parents may decide that the children have received sufficient education for the work they may do in life, at an earlier age, which they accomplished, in part, through a longer school year. In Chart IV the length of the school year, in days, is given for the United States, its five divisions and Pennsylvania. It is gratifying to discern that there has been a steady increase in the length of the school year since 1880.

In view of this fact it will be interesting to note how much more schooling is given to each child enrolled, each year, in terms of days. If our educational system is undergoing improvements and greater opportunities are offered for gaining an education, it is certainly important to know what has been the result of these advantages. Since this is not obtainable in statistics which indicate the amount of knowledge and training gained by the child, it is essential to, at least, make a comparison in days of actual attendance. This is shown in Chart V for the years given at the top of the chart. This chart gives a favorable report for the United States and all its divisions, and es-

CHART III .- PER CENT OF THE POPULATION 5 TO 18 YEARS OF AGE ENROLLED IN THE PUBLIC SCHOOLS.

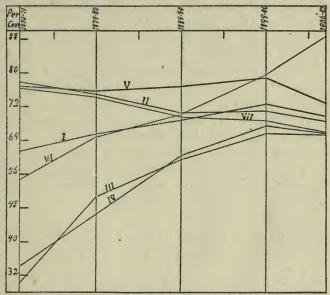
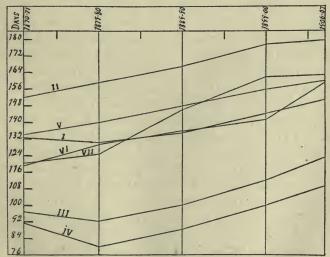


CHART IV.-LENGTH OF THE SCHOOL YEAR.



I. United States.

II. North Atlantic Division.

III. South Atlantic Division. IV. South Central Division.

North Central Division. VI. Western Division.

VII. Pennsylvania. pecially for those divisions which showed a decrease in the preceding charts, even under the influence of the compulsory attendance laws. Even the increase, in the divisions not having compulsory attendance laws, in the enrollment shown in Charts II and III does not make such a good showing when measured in terms of days schooling a year for each child enrolled.

In Chart VI this matter has been presented in a slightly different way. Here the entire population of the United States, its different divisions and Pennsylvania have been used as a basis of computation to test what has actually been done by our educational system, in terms of days. In this chart great variations are seen. Almost all the divisions are increasing the amount of schooling given in proportion to population. This is most marked in the Western Division, but, excepting this division, the change in amount has not been so marked since 1900. Only one division under compulsory attendance laws shows a decrease.

The above charts give some idea as to what our educational system has accomplished during the years 1870-71 to 1906-07. It is disappointing in that the child does not receive more days schooling each year, considering the increase in the length of the school year, and also in the fact that there is not a larger per cent of the children enrolled in school.

The number of illiterates, ten years of age and over, is also large for the United States and especially for some divisions. In Chart VII the per cent of the population, ten years of age and over, illiterate, for the last three censuses, is shown. The decrease in per cent is marked for almost all the divisions, and Pennsylvania shows a slight decrease. A comparison between the different divisions, in amount of illiteracy, is unfair, because in the two Southern divisions the problem of educating the negro still exists, and, in other divisions, especially where there are large manufacturing and mining interests, the per cent of foreign illiterate population is very large. This is especially true of Pennsylvania where 64 per cent of the illiterates are foreign born, while the number for the United States is 22 per cent. Negro illiterates, however, made up only 7 per cent of the illiterates of Pennsylvania and 46 per cent for the United States. From this it can readily be seen that a state which has few negroes and foreigners should have a small number of illiterates.

In Table II the per cent of illiteracy for the six largest cities of

CHART V.—AVERAGE NUMBER OF DAYS ATTENDED EACH YEAR BY EACH PUPIL ENROLLED IN THE PUBLIC SCHOOLS.

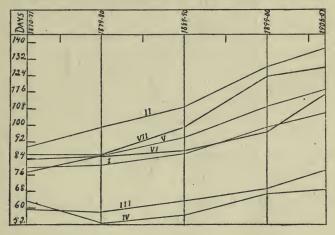
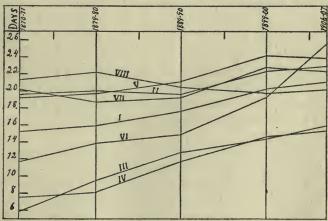


CHART VI. - DAYS IN SCHOOL EACH YEAR, BASED ON POPULATION



- I. United States.
- II. North Atlantic Division.
- III. South Atlantic Division.
- IV. South Central Division.
- V. North Central Division.
- VI. Western Division.
- VII. Pennsylvania.
- VIII. Philadelphia.

CHART VII.—PER CENT OF THE POPULATION, TEN YEARS OF AGE AND OVER, ILLITERATE.

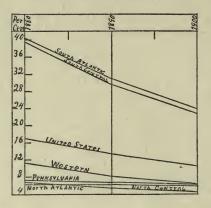


TABLE II.—PER CENT OF THE POPULATION, TEN YEARS OF AGE AND OVER, ILLITERATE.

City	All		Native White	Foreign White	Negro	
City	1960	1890	1900	1900	1900	
New York	6.8	7.69	0.4	13.9	10.0	
Philadelphia	4.4	4.97	0.6	12.1	11.8	
Chicago	3.9	4.63	0.2	8.2	8.0	
St. Louis	4.4	5.89	0.9	9.8	21.3	
Boston	5.1	5.69	0.2	11.3	10.6	
Baltimore	7.2	9.80	1.3	12.9	25.8	

the United States has been given for the census years 1890 and 1900. The position of Philadelphia among the cities can readily be seen from the table. The columns headed foreign white and negro show clearly the effect immigration and the negro race have in increasing the per cent of illiteracy.

But the problem that is confronting the school boards and public is the large army of children of school age that are not enrolled in school, many of whom, if neglected, will help to swell the number of illiterates for future decades. In Table III these facts have been presented for the census year 1900, as given by the United States census. This table shows that 20.16 per cent of the children 10 to 14 years inclusive were not enrolled in school in 1900. 577,649, or over 9 per cent, of the illiterates in the United States were between the years 10 to 14 inclusive in 1900. The per cent of non-attendance

TABLE III.—NUMBER OF CHILDREN IN SCHOOL AND PER CENT NOT ENROLLED IN SCHOOL.

	5 to 9	years inclus	ive	10 to 1	4 years inclu	isive	
State, Territory or City.	Census	Enrolled in school	Per cent not enroll- ed in school	Census	Enrolled in school	Per cent not enroll- ed in school	
United States	8,874,123	4,266,302	51.92	8,080,234	6,451,394	20.16	
North Atlantic Div. South Atlantic " North Central South Central Western "	2,110,213 1,379,742 3,012,485 1,939,754 431,929	1,740,161 552,735	67.42 42.24 71.50	1,908,183 1,247,791 2,805,982 1,738,387 379,891	1,655,543 818,310 2,475,341 1,164,245 337,955	13.24 34.42 11.78 33.03 11.04	
Pennsylvania Philadelphia New York Chicago St. Louis Boston Baltimore	686,605 125,409 354,747 187,395 58,627 48,896 51,097	390,412 78,812 216,620 103,937 36,726 34,587 27,056	37.16 38.94 44.54 37.36 29.26	624,241 109,886 301,264 160,350 54,974 42,362 48,904	259,384 115,927 44,649 39,031	16.31 20.81 13.90 27.70 18.78 7.86 21.00	

for 1900 has also been given for the six largest cities of the United States in order to compare the conditions in Philadelphia with those in other cities. In the per cent of children 5 to 9 years inclusive not in school, Philadelphia has second place but takes fourth place in the per cent of children 10 to 14 years inclusive not enrolled and for the per cent of children 5 to 14 years inclusive not enrolled.

In view of the facts presented above, the question naturally arises as to whether the compulsory attendance laws are efficiently and effectively enforced. Investigations have been made or are being made to find out what has actually been done. In order to confine this investigation to narrower limits, and to find out whether the law has been effectively enforced and if not, as far as possible, to ascertain the cause, Philadelphia has been chosen, not that it presents any peculiarities ir the execution of the law, but because its location permitted of such investigation as was the aim of this thesis, and, being a large city and possessing varied industries and a foreign population of some size, the difficulties confronting the bureau executing the compulsory attendance law would be representative. Before showing the conditions in the City, a short history of the compulsory attendance laws of Pennsylvania will be given, with charts added to show the enrollment and attendance in the State, outside of Philadelphia, and also comparisons of the enrollments and attendance for the last three census years.

CHAPTER II.

COMPULSORY EDUCATION IN PENNSYLVANIA.

In 1886 State Superintendent Higsbee advocated a census of all children 6 to 18 years in Pennsylvania so as to determine how many were out of school and the need of legislation on the subject. He wished also to correct irregularity of attendance. Again, in 1890, he noted that the population of the State had increased 23 per cent in 10 years and in cities 43 per cent in 10 years, but the attendance in public schools, only 11 per cent. Superintendent Waller in his Report for 1892 advocated compulsory attendance. In his Report for 1894 Superintendent Schaeffer argued for a school census; and also for laws that would compel children to go to school, by the aid of truant officers, if necessary. He also recommended the requirement of a certificate showing a minimum of four months attendance for all who take employment under 15 years of age.

The first compulsory attendance law for the State was passed in 1895. There is no account of the enforcement of this law, although steps were taken with a view to its enforcement, as was the case in Philadelphia. In 1897 an amendment to the law was passed, which extended the age limit from 13 to 16 years and the required time in school from 16 weeks to 70 per cent of the time the schools were in session. Provisions were made for special schools for the incorrigible. Superintendent Schaeffer favored a mild course in enforcing this law. In his Report for 1897 he said that "probably the most important duty is to create public opinion in favor of punishing parents and guardians whose negligence deprives the child of its right to an education. Ignorance and illiteracy will not be banished from Pennsylvania until all the people feel that a child's right to life, health, happiness, knowledge and moral training must not be abridged either by cupidity, carelessness and indigence of parents or by waywardness and shortsightedness of children themselves." The subject was again considered and July 11, 1901, an act became law which was more efficient than any of the former compulsory attendance laws of the State. This law provided that all children between 8 and 13 years and all between 13 and 16 years, not employed, should be in school. If no school is within two miles by the nearest traveled road, the child is exempt from compulsory attendance. The boards have power to decide what are lawful and not lawful excuses for absence. While

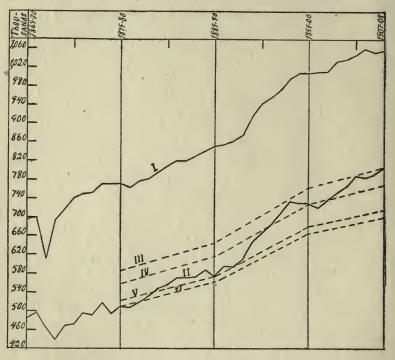
the period of attendance includes the entire school year, the boards have the power to diminish this to 70 per cent of the time the schools are in session, in their respective districts.

In order that the districts may receive their share of the State appropriation, the school boards must file affidavits with the Department of Public Instruction to the effect that they have complied with the requirements of the law of compulsory attendance. If the law is not enforced, one-fourth of the annual appropriation is withheld. This law was amended by the Act of May 29, 1907, which authorized attendance officers to enter any place, wherein any gainful occupation is carried on, to find whether any children employed there should be legally in school, and to prescribe methods of procedure and penalties in case of violation of the law. The amendment raised the age at which pupils may quit school and go to work from 13 to 14 years.

Accepting the year 1897 as the time of the passage of the first compulsory attendance law of this State that the school boards attempted to enforce, sufficient time has passed to note whether there has been any effect on the attendance and enrollment of the schools of the State. By reference to Chart II it is seen that the enrollment of Pennsylvania, in proportion to the population, steadily decreased during the years from 1870 to 1907. In Chart III was given the per cent of the population 5 to 18 years enrolled and there the decrease for Pennsylvania is not so great as in Chart II. The length of the school year and the number of days schooling given yearly to each child enrolled has steadily increased, while the number of days in school a year, in proportion to population, has greatly increased from 1880 to 1900, when, until 1907, it made a slight decrease, but this represents the amount of schooling for the State, exclusive of Philadelphia. Separate statistics and charts will be given to show what has been done, both for the sake of comparison and because the school statistics of Philadelphia and the rest of the State are not reported in the same way on a number of points, especially in respect to the periods covered in annual statistics, for which Philadelphia uses the calender and the rest of the State, the school year.

In Chart VIII is given the enrollment and attendance of the State, exclusive of Philadelphia, also attendance comparisons based on enrollment. Chart IX shows comparisons of the enrollment and attendance of the State for the last three census years and 1908. The upper unbroken line represents the enrollment at the periods given.

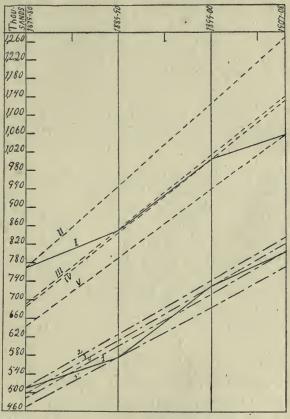
CHART VIII.—School Enrollment and Attendance in Pennsylvania, Exclusive of Philadelphia, With Attendance Comparisons Based on Enrollment.



- I. Enrollment.
- II. Attendance.
- III. Attendance estimated on 1907-08 enrollment.
- IV. Attendance estimated on 1899-00 enrollment.
- V. Attendance estimated on 1889-90 enrollment.
- VI. Attendance estimated on 1879-80 enrollment.

The upper broken lines show what the enrollment should have been if the same per cent of the population had been enrolled at all the periods as at the one used as a basis of comparison. This chart shows that the per cent of the population enrolled has steadily decreased since 1880 and in 1907-08 was over 16 per cent less than the total enrollment, based on the per cent for 1880. As in the various divisions of the United States, so in the state of Pennsylvania there has been a

CHART IX.—SCHOOL ATTENDANCE AND ENROLLMENT COMPARI-SONS FOR PENNSYLVANIA, EXCLUSIVE OF PHILADELPHIA,



- I. Enrollment.
- II. Estimated on 1879-80 enrollment.
- III. Estimated on 1889-90 enrollment.
 IV. Estimated on 1899-00 enrollment.
- V. Estimated on 1907-08 enrollment.
- 1. Attendance.
- 2. Estimated on 1879-80 attendance.
- 3. Estimated on 1899-00 attendance.
- 4. Estimated on 1907-08 attendance.
- . 5. Estimated on 1889-90 attendance.

steady decrease in enrollment, although the State has had a compulsory attendance law since 1897. The lower unbroken line of Chart IX represents the actual attendance and the lower broken lines, the estimated attendance based on the population of the census years and the estimated population for 1908. Here again 1879-80 leads, although the decrease is not regular and 1899-00 shows a marked increase over 1889-90, but there is a drop in the period 1900 to 1908.

Leaving out of the question the per cent of the population enrolled or in daily attendance and comparing the attendance with the enrollment, the results are much more favorable. The broken lines of Chart VIII represent the number that would have been in daily attendance at school, if the per cent of daily attendance had been the same as in the year that has been made the basis of comparison in each case. While in Chart IX 1879-80 held first place in the per cent of population enrolled and in daily attendance, it has now dropped to fourth place, and there has been a steady increase during the years until 1908. This shows that, while the compulsory attendance law has not succeeded in materially increasing the enrollment, there has been a marked improvement in lessing the evils of irregular attendance.

In order to be just and fair in the comparisons and not give a false impression as to the effect of the compulsory attendance law upon attendance or enrollment, attention must be called to the decreasing proportion of the population 5 to 19 years inclusive. The decrease for the State for the twenty years, 1880 to 1900, was 3.3 per cent, while the decrease for the United States for the same period was 2.0 per cent. The result of the decreasing number of children for the periods compared has been shown for the United States, so it has been considered sufficient merely to mention the fact of a decrease in Pennsylvania and state the per cent of decrease.

CHAPTER III.

COMPULSORY EDUCATION IN PHILADELPHIA.

In Philadelphia no formal action was taken to execute the compulsory attendance law until it was amended in 1897. The Board recognized the difficulty that confronted them in gaining the information necessary, and that it was highly improbable that indifferent and illiterate parents and those whose chief desire was that their children should, at the earliest age possible, earn a contribution towards the support of the family would accept with good grace the enforcement of the law in cases where the earnings of the child must cease through such enforcement. Furthermore, some provisions of the act were such as to enable unwilling parents or guardians to impede the accomplishment of its beneficient purposes,—the right of the parent or guardian to designate the particular school to which the child

should be sent and thus perhaps defeat the purpose of the law by naming a school already filled to the limit of its capacity. Added to this, the children subject to this law might live in localties where the schools were already crowded or, in the absence of a compulsory vaccination law, be ordered from school through the failure of their parents to have them vaccinated.* In 1897, however, the execution of the law was entrusted to a committee of the Board of Education and the practical management of its enforcement was placed in the hands of the Superintendent who, in turn, delegated the matter to one of his Associates. The work continued under this organization until 1901 when the present Bureau of Compulsory Education was organized.

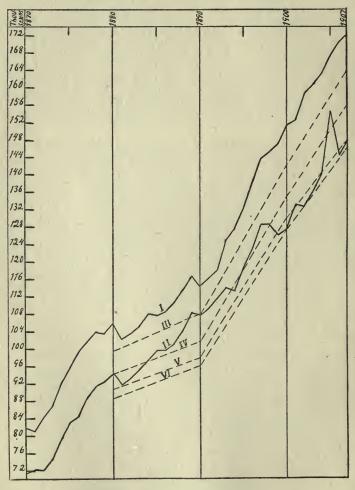
It will thus be seen that the law has been in operation in Philadelphia for a period of over eleven years. In taking up the results of this work, as shown by the various city reports, attention will first be directed to the statistics which show the attendance and enrollment. For the sake of a convenient comparison, these statistics will cover a period of thirty years, including three census years in which a comparison can be made between population, enrollment and attendance. Whenever the statistics quoted do not cover the full period, it is due to the fact that the records were found lacking. Unfortunately, no direct comparisons can be made between the City and State or the United States, in the matter of enrollment, as it was not possible to obtain the total enrollment for the different years covered and, when obtainable from the reports of the City before 1892, was not serviceable for comparison from the failure to eliminate duplicate names. But the Reports for 1907 and 1908 give this information. Hence, basing our information on the statistics of 1907, it was found that the total enrollment, excluding duplicates, is 27.15 per cent higher than the average enrollment, using the latter as the basis of comparison, and 24.93 per cent higher than the enrollment on December 30th.

The upper unbroken line of Chart X shows the enrollment on December 30, in Philadelphia, for thirty years. The lower unbroken line shows the average daily attendance for the same period. There is a gradual rise, with a few exceptions, in both lines, and their dis-

^{*}Annual Report of the Board of Education of Philadelphia, 1897.

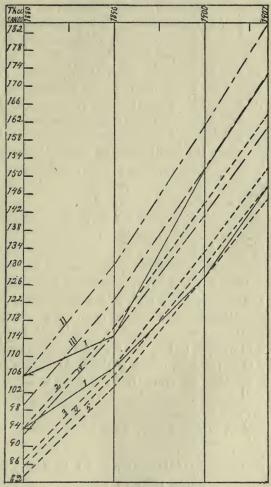
[†]In the comparisons in this chapter enrollment on December 30th, has been used instead of average enrollment because the latter was not available for every year of the period 1877 to 1907.

CHART X.—SCHOOL ENROLLMENT AND ATTENDANCE OF PHILA-DELPHIA, WITH ATTENDANCE COMPARISONS BASED ON ENROLLMENT.



- I. Enrollment.
- II. Attendance.
- III. Attendance estimated on 1890 enrollment.
- IV. Attendance estimated on 1880 enrollment.
- V. Attendance estimated on 1907 enrollment.
- VI. Attendance estimaten on 1900 enrollment.

CHART XI.—SCHOOL ENROLLMENT AND ATTENDANCE COMPARISONS FOR PHILADELPHIA.



- I. Enrollment.
- II. Estimated on 1880 enrollment.
- III. Estimated on 1900 and 1907 enrollments.
- IV. Estimated on 1890 enrollment.
- 1. Attendance.
- 2. Estimated on 1880 attendance.
- 3. Estimated on 1890 attendance.
- 4. Estimated on 1907 attendance.
- 5. Estimated on 1900 attendance.

tance apart varies little, but unfortunately, the variation is greatest for the period that interests us most.

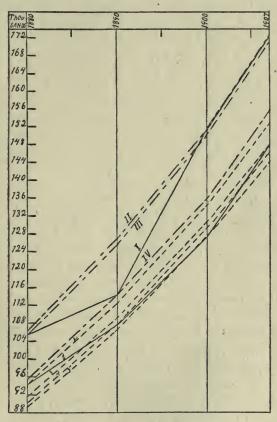
Before actually testing the results of the attendance and enrollment for the period, by a comparison with the actual population available or of school age, a slight digression will be made to see what the city is doing educationally, that is, numerically, in units of the whole These facts can be given for the census years only. with a comparison of school statistics and estimates for the year 1907. The two unbroken lines of Chart XI represent the enrollment on December 30th, and the average attendance for the years named. Using these lines as bases, projected broken lines have been drawn showing what the enrollment and average attendance ought to have been, if the same per cent of the population had been in school in the other census years as was in school in the year used as a basis for comparison in each case. This chart does not give a very promising outlook or grounds for proof to the efficiency of the compulsory attendance law, especially in the enrollment, although there has been no drop in this line since 1890. By reference to the preceding chart it will be seen that, unfortunately for the comparison, the year 1890 shows a lower enrollment than the preceding year. The average attendance lines do not show as much variation and also show a slight increase since 1900. No comparisons between enrollment and average attendance were intended in this chart, although it is of interest to note the broken average attendance line based on the 1880 per cent, which is above the broken enrollment line based on the 1890 per cent. But this chart is not to be taken to test the actual increase in attendance or enrollment, in view of the fact that no account has been taken in the comparison of the actual number of children of school age. That this is a matter worthy of

TABLE IV.—DECREASE IN POPULATION 5 TO 19 YEARS INCLUSIVE FROM 1880 TO 1900.

STATE OR CITY	Per cent of po	Per cent of de-		
STATE OR CITY	1900	1890	1880	crease in 20 yrs.
United States Pennsylvania Philadelphia	32.3 30.3	33.8 32.0 27.5	34.3 33.6 26.6	2.0 3.3 .9†

†Per cent of decrease in ten years.

CHART XII.—SCHOOL ENROLLMENT AND AVERAGE ATTENDANCE
COMPARISONS FOR PHILADELPHIA, BASED ON THE WHOLE
NUMBER OF CHILDREN 5 TO 19 YEARS INCLUSIVE.



- I. Enrollment.
- II. Estimated on 1900 and 1907 enrollments.
- III. Estimated on 1880 enrollment.
- IV. Estimated on 1890 enrollment.
- 1. Attendance.
- 2. Estimated on 1880 attendance.
- 3. Estimated on 1907 attendance.
- 4. Estimated on 1890 attendance.
- 5. Estimated on 1900 attendance.

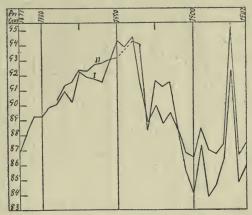
consideration can easily be seen from Table IV, giving the per cent of children for the different age periods, places and census years mentioned in the table.

Table IV is given to show the necessity of taking into consideration the varying per cent of the population of school age, in comparing the school enrollments for any years or periods to see whether there has been an increase or decrease in the number of children enrolled, in proportion to the population.

In Chart XII comparisons similar to those in Chart XI have been made, using, however, the number of childreen between 5 and 19 inclusive as a basis and taking into consideration a gradual decrease in the number of children as shown by the average in Table IV. In this chart the year 1907 shows the largest number of children enrolled at the end of the year, for any of the four years compared. Of course, the number of children in 1907 is based on an estimate, which will be discussed later in order to show that the estimates are rather too low than too high. But in case this estimate would prove to be too low, it would reduce the per cent of children enrolled on December 30th, 1907 and also lower the rank of this year among the others. In the matter of average attendance the year 1880 still holds first place, though somewhat lower in comparison with the preceding chart. This chart is a true index to the effect of the compulsory attendance law as seen by the records of attendance and enrollment, although no definite conclusions can be drawn without further facts and proof. But, in passing, attention should be called to the fact that any inferences based upon the gradual rise in enrollment since 1890 and the comparisons as shown by the broken lines are complicated by the fact that the average attendance line does not show as much improvement. Increased average attendance has not kept pace with the increased enrollment. the question may arise as to how the children can be or more irregular than before the compulsory attendance law. This matter will be considered under excuses. In the comparisons for Pennsylvania, exclusive of Philadelphia, however, increased average attendance was found to be more than keeping pace with increased enrollment.

In Chart X comparisons have been made between enrollment on December 30th of the last three census years and 1907 and the average attendance for those years. Here the enrollment has been used as the basis for comparison. The unbroken lines represent the actual facts and the broken lines the comparisons. From the chart it can readily be ascertained what relation enrollment bears to attendance at the various periods, and, while the margin of difference is very great for 1900, it is slowly lessening in favor of average at-

CHART XIII.—PER CENT OF AVERAGE ATTENDANCE TO ENROLL-MENT DEC. 30TH, AND AVERAGE ENROLLMENT.



- I. Per Cent of average attendance to enrollment Dec. 30th.
- II. Per Cent of average attendance to average enrollment.

tendance. It will be noticed also that 1900 has the most unfavorable record.

In Chart XIII this comparison has been made in terms of per cent of average attendance to enrollment December 30th of each year during the period 1877 to 1907. To this has been added a comparison in terms of per cent between the average attendance and average enrollment for each year for which the latter statistic could be obtained. It can be seen from this that the average enrollment for the year does not vary much from the enrollment December 30th. The last decade in the comparisons does not show as high averages as the preceding but yet shows no decline during its succeeding years. The high per cent for 1905, in comparison with the years immediately preceding and following, leads to the doubting of the accuracy of the reported average attendance for that year.

Since Charts XI and XII reveal the fact that there are less children in school, in proportion to population, than two decades ago, the question aries as to whether school accommodations have kept pace with the increase in the number of children of school age. To effectively execute the compulsory attendance law, one of the necessary conditions is a sufficient number of seats in the schools to accommodate all who apply for admission or who are brought in under

TABLE V.-AVERAGE NUMBER OF PUPILS TO A ROOM BASED ON

37	Enrollment		Attend-		Enrol	lment	Attend- ance
Year	December Average and	ance	ance Year I	December 30th	Average		
1907	40.0	39.2	34.3	1892	41.1	41.2	38.8
1906	40.5	39.7	34.4	1891	41.8		39 3
1905	41.5	40.3	38.3	1890	42.4	42.9	40.0
1904	41.8	41.3	36.1	1889	44.6	44.6	41.5
1903	41.8	40.8	35.3	1888	45.0	44.4	41.2
1902	42.1	40.6	35.3	1887	48.2	47.7	44.2
1901	41.9	41.3	36.5	1886	46.2	46.0	42.5
1900	42.2	41.0	35.5	1885	47.2	47.2	43.6
1899	42.0	41.4	35.9	1884	48.6	47.9	43.8
1898	41.9	41.9	37.0	1883	48.6	48.2	44.0
1897	42.6	41.7	38.1	1882	48.5	48.3	43.7
1896	42.6	41.4	37.8	1881	48.4		43.5
1895	43.2	42.4	38.9	1880	50.9		45.4
1894	41.2	41.5	36.6	1879	50.0		44.6
1893	41.9	40.7	38.3	1878	50.6		44.6

the law. To test adequacy of school accommodations, Table V has been computed showing how many children were in each room each year for thirty years. The table has been computed using the enrollment on December 30th, average enrollment and average attendance as bases respectively. It will be noted that all three columns show a steady decrease in numbers during the period. Unfortunately, this table shows the averages for all the public schools in place of limiting them to the elementary schools which alone include about all the children who are of compulsory school age.

While a decrease in the number of pupils per teacher leads to increased efficiency in school work, it makes necessary the providing of more schoolrooms and the employment of more teachers in order that the same number of children may be accommodated. That adequate accommodations have not yet been furnished is indicated by the number of children on half time. A further question as to whether such increased accommodations as have been provided have been distributed with due regard to the relative school population, is something difficult to determine. While inadequacy of school accommodations may have prevented the enforcement of the compulsory attendance law to the fullest extent, the law makes it incumbent upon school boards to furnish sufficient accommodations for all children who apply for admission to the schools or are brought in under the law. Therefore, insufficient school accommodations can not be used as an excuse for not fully enforcing the law, although the Bureau of Compulsory Education is relieved of the responsibility from

failure to enforce the law under such conditions. The Bureau must work on the assumption that there is sufficient accommodation for all whom it may bring to the schools through the attendance officers. Inadequacy of provision may have another evil effect in creating a desire in children placed on half time to continue to attend less than the full day sessions, unless persuasion is applied through school authorities or attendance officers.

CHAPTER IV.

THE SCHOOL CENSUS

While it is an undoubted fact that one of the necessary things in efficiently executing the law of compulsory attendance is a school census that gives the exact number of children in a city or district, the best means of securing this is open to question. The law of Pennsylvania provides that a school census shall be taken of all the children between 6 and 16 years, by the assessors at the spring election, but that any district has the power to employ the attendance officers for this work. The first school census of Philadelphia, after the passage of the compulsory attendance law, was taken in 1897 by the assessors. Their lists were given to the Department of Education, but, after some weeks of tabulating, it was found that the census did not give the information necessary for successfully executing the law.* The following year this work was assigned to the attendance officers who have continued taking the school census.

Even though due care be exercised by those taking the census, its accuracy may be questioned in the light of the experiences at other places where a system of checking and counter-checking has been employed to test its accuracy and, if possible, to determine the amount of variation. In Conshohockin the assessor's lists showed that there were 1076 children 6 to 16 years in 1908, who should have been enrolled in the public schools. The principals and teachers compared these lists with the names on the enrollment, and added to the latter the names which the lists showed that it should have, (the private schools were omitted in the checking and their pupils deducted from the school census.) Then the enrollment was compared with the assessor's lists to find how many names of children

^{*}Annual Report of the Board of Education of Philadelphia, 1897.

6 to 16 years were not on the census lists, as shown by the school enrollment. In 1908 this counter-checking showed that the assessor had omitted 195 names of children 6 to 16 years, and in 1907 the number was 245. The per cent of error is large for a town where the difficulties of taking the census should not be many. Yet, the organization of the bureau or board which takes the census may not be as complete as in a large city where the work is fully departmental.

New York has variations in the number of children reported as of school age, that the Superintendent, according to his Report for 1907, could not explain satisfactorily. The number of children in school and accounted for in other ways exceeded the number reported by the police officers, although the latter census was high as compared with the estimated school population of the City. census taken by the policemen November, 1906, showed that there were 459,050 children between 8 and 14 years in New York. cording to the same census there were 76,873 children 8 to 14 years in the private schools, 9,799 children working illegally, 411 truants, 3,050 physically unable to attend school and 6,411 at home illegally. This would leave 362,506 children 8 to 14 years as the public school enrollment at the time of taking the census. In June 1907 there were 396,201 children between 8 and 14 years in the public schools. The difference in time between taking the census and reporting of the enrollment would account for part of the increase, but the amount is too large to be fully explained in that way.

The assessors' census for Philadelphia for 1905 showed 199,099 children 6 to 16 years, according to the Report of the Bureau of Compulsory Education for 1905, page 7. The attendance officers' census for the same year showed 223,591 children 6 to 16 years. The difference between the two is 10.95 per cent. This comparison is in favor of the attendance officers' census, but, if a comparison is made with Conshohockin, the latter census for Philadelphia is lower than an estimate based on the per cent of difference found in the comparisons made at Conshohockin.

From this it can readily be seen that the question of the accuracy of the school census is of more than local importance. Two things are necessary to prove the correctness of the census: first, to find how many names are on the school enrollments that have been missed in making the census lists; second, to determine how many names are not on the school enrollments or census lists.

The second means proposed for testing the accuracy of the census is difficult, and it was not possible to use it in this investigation. This could be done by University or College settlements, Church societies and philanthropic organizations which care for children. It could be made for small areas only, and, while not conclusive as to the entire number of children not enrolled in school or census, it would give an idea as to the approximate number. With this information in hand, the Bureau of Compulsory Education could attempt to enroll those children in the schools.

It was the original plan of this investigation to use the first method, suggested above, for testing the accuracy of the school census. The law requires the Bureau of Compulsory Education, or whatever bureau or board that enforces the attendance law, to prepare lists which show how many children between 8 and 16 years should be enrolled in each school district, with the names of all the children. These lists are to be sent to the principals, early in September, who compare these with their enrollments and add to the latter the names of such children as are on the census lists and not enrolled. The names which are added are given to the attendance officers who try to place the children in school or find why they should be excused from attendance. To make the comparisons proposed it was necessary to have access to these lists and the enrollments. It was hoped that these lists would be accessable, either through the courtesy of the principals or the Bureau of Compulsory Education, in order to make comparisons for several schools. this way an estimate could have been made of the number missed in taking the census. It was impossible to carry out this part of the investigation from the fact that no lists were sent out by the Bureau of Compulsory Education in 1908, as required by law.

Notwithstanding this fact, the Report of the Bureau of Compulsory Education for 1908, page 12, shows that the number of non-attendants in September, 1908, was 2,554. It states that these cases were investigated and disposed of satisfactorily, according to the disposition of the cases there enumerated. The number 2,554 represents the difference between the whole number of children 8 to 16 years, as shown by the attendance officers' census and the number enrolled in the schools, plus those found to be employed, as reported by the attendance officers. This method of determining the number of children 8 to 16 years not in school is considered satisfactory by the

Bureau of Compulsory Education. It can readily be seen that the law may easily be evaded by giving a false statement as to enrollment. If an incorrect report is given, there is no means of checking this and presenting the names of children, falsely reported, to the attendance officers for investigation. The present method of comparison to find out how many children are not in school is only a make-shift, at the best, and an expenditure of money for increasing the efficiency of the schools and executing the laws of the State, that brings no return to the taxpayers. A set of enrollment cards, however, is made from the census, which are supposed to contain the names of all the children 6 to 16 years, in Philadelphia. The value of these cards in the office of the Bureau of Compulsory Education and in the hands of the attendance officers can rightly be questioned. Their value for information may be granted, but they cannot be useful in placing all the children of school age in the schools of their respective districts. Comparisons must be made between lists of children obtained from different sources, so that one can be used as a check upon the other. This is possible only by comparing census lists and school enrollments.

In view of the difficulties encountered, as mentioned above, the only possible means of comparison was between the national census for 1900 and the school census for the same year. But there was no record of a school census of Philadelphia taken by the attendance officers in 1900. The wording of the Superintendent's Report for 1901, page 80, seems to be conclusive evidence that none was taken that year. He mentions three censuses and compares them, heading the columns with the years 1898, 1899 and 1901. No statement as to the reason for the failure to take a school census in 1900 could be found in any of the reports. Some reasons were suggested verbally but with no certainty that could be accepted and stated in this thesis.

Another difficulty encountered in comparing the national and school censuses of Philadelphia was caused by the fact that the age periods were not reported in the same way. The national census used five year periods, as 5 to 9 years inclusive, 10 to 14 years inclusive, although single year periods were given for the United States and the states. The school census gave the number of children between 6 and 21 years, 6 and 8 years, 8 and 16 years and 16 and 21 years. In order to avoid errors in comparison, as far as

TABLE VI.—PER CENT OF CHILDREN BELONGING TO EACH YEAR OF THE FIVE YEAR PERIODS.

	U	nited	States			Pe	nnsylva	nia
Year	1900	1890	1880	Average	1900	1890	1880	Average
5	20.4	20.4	20.9	20.52/3	20.3	20.6	20.5	20.42/3
6	20.6	21.3	21.2	21.01/3	20.7	21.2	21.2	21.01/3
7	20.1	20.0	19.8	19.92/3	20.0	20.1	20.0	20.01/3
8	20.1	20.1	20.0	20.02/3	20.0	19.5	19.6	19.7
9	18.8	18.2	18.1	18.32/3	19.0	18.6	18.7	$18.7\frac{2}{3}$
10	21.5	21.4	22.4	21.72/3	21.1	21.0	21.7	21.22/3
11	19.6	18.1	18.5	18.71/3	19.9	18.7	18.8	19.11/3
12	20.3	21.4	21.6	21.1	19.8	20.8	21.1	20.5%
13	19.2	18.9	18.8	18.92/3	19.5	19.1	19.3	19.3
- 14	19.4	20.2	18.7	19.41/3	19.7	20.4	19.1	19.71/3
15	20.3	19.7	18.7	19.5%	20.0	19.2	19.1	19.41/3
16	20.6	21.2	19.7	20.5	20.5	21.1	19.7	20.41/3.
17	19.7	19.1	18.9	19.21/3	19.7	19.7	19.6	19.62/3
18	20.3	21.4	22.6	21.41/3	20.2	20.8	21.4	20.8
19	19.1	18.6	20.1	19.22/3	19.6	19.2	20.2	19.62/3
20	20.8	20.7	21.9	21.11/3	20.1	20.2	21.4	20.52/3

possible, Table VI has been formed. This table shows what per cent of the children in a five year period belong to each year. The per cents have been worked out both for the United States and for Pennsylvania and have been computed for the last three census years. This plan seemed preferable to taking one-fifth of those in any five year period as representative of the number that belonged to a certain year of that period. It will be seen from the table that the amount of difference between the years of each period is very small, both for the United States and for Pennsylvania. Yet, for the sake of accuracy, this should be considered. For Philadelphia and the cities of Pennsylvania the per cents of Pennsylvania given under 1900 will be used in determining the number of children of the ages to be used in the comparisons. In all other comparisons the same year for the United States will furnish the per cents.

Since there is no school census reported for Philadelphia for 1900, a mean between the 1899 and 1901 school censuses has been taken to represent the census for 1900. Comparisons have been made between this mean and the national census for 1900, for the age periods given in Table VII. This table shows that the difference between the national census and the school census (mean between the 1899 and 1901 school censuses taken by the attendance officers) increases as it reaches the age period where childrn leave school to go

TABLE VII.—COMPARISONS OF SCHOOL AND NATIONAL CENSUSES OF PHILADELPHIA FOR 1900.

Age Period	School census (mean between 1899 and 1901 school censuses)	Number based on nation-	Amount census is national c	Amount of variation		
1	school censuses)	al census.	Number	Per Cent.	by years.	
6 to 8 years	47,373	51,041	3,668	7.19	1,834	
6 to 16 "	205,081	231,791	26,710	11.52	2,671	
8 to 16 "	157,708	180,750	23,042	12.75	2,880	
16 to 21 "	68,334	114,264	45,930	40.20	9,186	
6 to 21 "	273,415	346,055	72,640	20.99	4,843	

to work. The difference is especially large in the 16 to 21 years' period. In computing the per cent of difference in column 5, the numbers in column 3 have been used as the bases.

Table VIII has been constructed to show what per cent of the population of Philadelphia was of the different age periods given in the table, for 1900. The per cents for Philadelphia have been determined from the mean of the 1899 and 1901 school censuses, taken by the attendance officers, and from the national census. The total population, upon which these per cents have been

TABLE VIII.—PER CENT OF THE POPULATION OF DIFFERENT AGE
PERIODS IN 1900.

Age Peroid	Philad	lelphia	Pennsylvania	United States	
Age 1 eloid	School census National census		1 emisyivama	Office States	
6 to 8 years	3.66	3,95	4.44	4.78	
6 to 16 "	15.85	17.92	20.49	22.06	
8 to 16 ·"	12.19	13.97	16.05	17.28	
16 to 21 "	5.28	8.83	9.53	10.02	
6 to 21 "	21.13	26.75	30.02	32.08	

based, is from the national census for 1900. To these statistics have been added the per cents for Pennsylvania and the United States, for the same age periods. In this table the per cents of the school census are below the per cents determined from the national census, for Philadelphia. The amount of difference increases to the age for going to work. The table shows that a comparison between a city and state, or the United States, can not be made with any due degree of accuracy.

In order to compare Philadelphia with other cities, Table IX has been computed. Instead of the age periods used in Table VIII, five year periods have been used. Nine cities have been chosen. The per cent of children of the different five year periods,

TABLE IX.—COMPARISONS OF THE PER CENT OF THE POPULATION OF DIFFERENT AGE PERIODS IN 1900.

,		•			
CITY OR STATE	5 to 9 years	10 to 14 years	15 to 19 years	20 to 24 years	5 to 19 years
New York	10.32	8.76	8.81	10.32	27.89
Boston	8.72	7.55	7.53	10.39	23.80
Buffalo	11.34	10.17	9.15	9.28	30.66
Chester	10.33	9.26	9.37	10.72	28.96
Cincinnati	9.87	9.39	9.59	.10.38	28.85
Cleveland	10.96	9.47	9.54	10.38	29.97
Fort Wayne	10.28	9.84	9.99	10.01	30.11
Harrisburg	9.49	9.33	9.49	10.49	28.31
Philadelphia	9.69	8.49	8.49	10.17	26.67
Average	10.11	9.14	9.11	10.24	28.36
Massachusetts :	9.13	8.17	8.48	9.96	25.78
New York	9.82	8.84	8.81	9.67	27.47
Ohio	10.48	9.98	9.81	9.46	30.27
Pennsylvania	10.89	9.90	9.51	9.59	30.30
Average	10.08	9.22	9.15	9.67	28.45
United States	11.70	10.70	9.90	9.70	32.30

from 5 to 24 years inclusive, have been determined from the national census for these cities. To these statistics have been added those for four states and the United States.

As the 5 to 19 years' inclusive period covers the years for which the school censuses are generally taken, the variations between the cities for this period will be noted. Boston has the lowest and Buffalo, the highest per cent of the population 5 to 19 years inclusive. The amount of difference between these two cities is not quite 7 per cent. Philadelphia has second place in the 5 to 10 years' inclusive column, in smallness of per cent. It is also almost two per cent below the average for the nine cities. Notwithstanding this fact, the per cent is much too high when a comparison is made with the school census taken by the attendance officers. Table VIII showed that 21.13 per cent of the population of Philadelphia in 1900 was between 6 and 21 years, according to the mean between the school censuses for 1899 and 1901. Table IX shows that 26.67 per cent of the population was between 5 and 19 years inclusive in 1900, according to the national census. If the year 20 in the 6 to 21 years' period were exchanged for the year 5 in the 5 to 19 years' inclusive period, the former per cent would be only a fraction higher,—26.75 per cent. The 21.13 per cent, however, is lower than any per cent given in the 5 to 19 years' inclusive period. Even Boston, where the difference between the school and national censuse; was very small for 1900,

as will be shown below, has a higher per cent than the 21.13 per cent of the school census of Philadelphia.

The proportion of the population 5 to 19 years inclusive is, as a rule, higher for the states than the cities given in the above table. There is variation between the states as is the case with the cities. The United States shows a higher per cent for the 5 to 19 years' inclusive period than any of the cities or states of Table IX.

In Fort Wayne, Indiana, the Superintendent of schools has made comparisons between the school census of that City and the national census.* He has accepted 25 per cent as the minimum and 30 per cent as the maximum limits of the population between 6 and 21 years. If the school census shows a smaller number than 25 per cent of the population of the city, according to the national census, or a number larger than 30 per cent, the accuracy of the school census is open to question. Possibly these limits do not permit of enough variation to be applied to any city. Maximum and minimum limits would have to be determined for each state and city, as can readily be seen by a reference to Table IX. Immigration and the size of the city would have to be considered. To include all the cities of Table IX, the minimum and maximum limits would have to be 23 and 33 per cent respectively. For Pennsylvania the minimum and maximum limits of the per cent of the population between 5 and 19 years inclusive or 6 and 21 years might be placed at 25 and 31 per cent respectively. For Philadelphia the limits suggested for Fort Wayne,-25 and 30 per cent,-appear to be satisfactory. This minimum limit of 25 per cent, however, is too high for the school census of 21.13 per cent given in Table VIII.

The above comparisons between school and national censuses have been made on the assumption that the national census is correct. The charge of incorrectness may be made against the national census, since there are difficulties to overcome in taking the national as well as the school censuses. But, since the national census makes an enumeration of all the people and the school census records only those 6 to 16 years in Pennsylvania (formerly 6 to 21 years), accuracy ought to be in favor of the former. There would be less reason for eluding or giving a false or inaccurate statement to the national census officers,

^{*}Annual Report of the Superintendent of Public Schools of Fort Wayne, Indiana, 1907, pages 17-18.

since attendance or non-attendance at school would not be affected by any report or information given.

In order to test the accuracy of the national census, a comparison has been made between the number of children of a certain age reported in school in Philadelphia, for 1900, by the national census, and the number reported in school for the same age and period by the school reports of the City. The national census for 1900 reported 165.818 children 5 to 14 years inclusive enrolled in the schools of Philadelphia. This number included those enrolled in the private as well as in the public schools. It has not been possible to determine what per cent of the children were enrolled in the public schools. According to the Report of the Bureau of Compulsory Education for 1905, page 9, 75.27 per cent of the children 6 to 16 years enrolled were in the public schools. According to the Report of the same Bureau for 1908, page 14, 73.74 per cent of the children 6 to 16 years enrolled were in the public schools. Assuming the accuracy of these figures and that the variation for the period 1900 to 1905 was very small, 75 per cent can be accepted as a generous basis for the per cent of children 6 to 16 years enrolled in the public schools in 1900, out of the total number 6 to 16 years enrolled in all the schools. slightly lower than the per cent for 1905, although a higher per cent would favor the comparison. The next difficulty encountered in this comparison was to determine how many children enrolled in the public schools were between 5 and 14 years inclusive. This information could be obtained for June 30th, 1908,* when 87.62 per cent of the children in the public schools were between 5 and 14 years inclusive. If 75 per cent of the number reported by the national census were in the public schools, there were 124,364 children 5 to 14 years inclusive in the public schools when the census was taken. Assuming that 87.62 per cent of the children in the public schools on June 30th, 1900, were 5 to 14 years inclusive, as was the case on June 30th, 1908, and that 124,364 represented this per cent, the whole number in the public schools on June 30th, 1900, should have been 141,935. The enrollment for June 30th is the lowest of any month of the year. It was equal to 94.95 per cent of the average enrollment for the year 1908. Assuming that the difference between the June 30th and average enrollment has been very small, the 94.95

^{*}Annual Report of the Superintendent of Public Schools of Philadelphia, 1908

per cent has been accepted for 1900. If 141,935 represented the enrollment on June 30th, 1900, and this was 94.95 per cent of the average enrollment, the average number of children enrolled in 1900 was 149,468. The School Report for Philadelphia for 1900 gave an average enrollment of 147,314. The amount of difference between the average enrollment determined from the national census by the aid of the per cents based on the school reports and the average enrollment reported by the Superintendent of Schools for 1900 is 2,154, or 1.4 per cent based on the estimated average enrollment.

The per cent of difference between the national census and the school reports, when enrollments are compared, is very much smaller than the difference between the national and school censuses. In the case of the enrollment comparisons, the difference may be accounted for by a difference in the time of reporting the enrollments compared, since one month would give a difference, in the case of some months, of more than the per cent of difference given above. that is, the 1.4 per cent. If the same per cents were used to compute the 1908 average enrollment from the national census, the resulting number would be below the average enrollment given in the School Report of Philadelphia for 1908. Since the national census would have had to be estimated for that year, the comparison has not been recorded in this investigation. The above comparisons favor the assumption that the national census is correct. The enrollment must be accepted as a safe basis by which to test the accuracy of the national census. The national census, therefore, can be accepted as correct in the comparisons already made between the national and school censuses of Philadelphia and similar comparisons that are now to be made for other cities.

In Table X comparisons have been made between the school and the national censuses for 1900 for thirteen cities of the United States. The fourth column shows how many children were of a certain age, for the respective cities, determined from the national census for 1900. Since the national census gives five year periods only, in the case of cities, to show what part of the whole population is of a certain age, the per cents in Table VI have been used in computing part periods. Chicago may be taken to illustrate the method employed. The school census of Chicago reported the number of children 6 to 21 years. Therefore, the number for the two periods of the national census, 9 to 19 years inclusive, can be accept-

TABLE X.—COMPARISONS OF SCHOOL AND NATIONAL CENSUSES FOR 1900.

City	Age Period	School census	Number based on national	School cabove na census.			bove
			census	Number	percent	number	percen
Boston	5-15 years	90,144	91,258			1,114	1.22
Chicago	6-21 "	626,516	490,913	135,603	27.62		
Cincinnati .	6-21 "	108,391	94,490	13,901	14.71		
Cleveland .	6-21 "	109,047	114,122			5,075	4.45
Detroit	5-20 "	81,681	86,188	1		4,507	5.23
Fort Wayne.	6-21 "	14,036	13,576	460	3.39	_,	
Indianapolis.	6-21 "	40,073	45,778			5,705	12.46
Philadelphia	6-21 "	273,415	346,055			72,640	20.99
Allentown .	6-21 "	8,974	10,282			1,488	14.47
Chester	6-21 "	6,886	10,858			3,972	
Erie	6-21 "	16,195	15,439	756	4.90	0,772	00.00
Harrisburg .	6-21 "	11,296	14,288	,,,,		2,992	20.94
Lancaster	6-21 "	9,999	12,175			2,176	

ted without modification. To this number was added the number of children 6 to 9 years by taking 20.4 per cent from the 5 to 9 years' inclusive period, according to Table VI, column 2, under the United States. In the same way the number 20 years old can be determined from the national census. The sum of those 6 to 9 years inclusive, 10 to 14 years inclusive, 15 to 19 years inclusive, and 20 years, was the number of children in Chicago 6 to 21 years, in 1900, according to the national census. The school censuses given in column 3 have been taken from the Report of the United States Commissioner of Education for 1900.

The amount and per cent of difference between the school and national censuses have been shown in the table. In the cities not in Pennsylvania, this is greatest in Chicago, where the school census was 27.62 per cent higher than the number based on the national census. According to the school census of Chicago, 36.88 per cent of the population was 6 to 20 years inclusive. This per cent is above any of the per cents in the 5 to 19 years' inclusive column of Table IX. Especial attention should be called to Boston and Detroit where the school and national censuses could be compared without any estimates. The per cent of difference between the two censuses is very small, especially in the case of Boston. The difference in the time of taking the two censuses could account for the difference in Boston. Philadelphia shows a school census lower than the number based on

the national census. This appears to be another point in favor of the argument that the school census of Philadelphia, taken by the attendance officers, has been too low, and a table below will show that it is still too low. A comparison between the six cities in Pennsylvania shows that the conditions are not very promising in the State. The 36.58 per cent for Chester is considered correct in the light of a special census that added the names of almost 2,000 children to the number enrolled by the ward assessors.

TABLE XI. - COMPARISONS OF ESTIMATED AND NATIONAL CENSUSES.

		1900				/ 1890		
CITY OR STATE	National	Estimated	Estimates low	too	National	Estimated	Estimates low	too
	census	census	Amount		census	census	Amount	Per Cent
Boston	560,892	534,115	26,777	4.8	448,477	475,152	26,675*	6.0*
Buffalo	352,387	356,194	3,807*	1.1*	255,664	192,554	63,100	24.7
Cincinnati	325,902	338,677	12,775*	3.9*	296,908	294,039	2,869	1.0
Cleveland	381,768	362,560	19,208	5.0	261,353	227,463	33,890	13.0
Washington	278,718	283,160	4,442*	1.6*	230,392	246,049	15,657*	6.8*
Philadelphia	1,293,697	1,246,758	46,939	3.6	1,046,964	1,020,318	26,646	2.5
Chicago	1,698,575	1,696,515	2,060	0.1		, ,	,	
Massachusetts	2,805,346	2,694,801	110,545	3.9	2,238,943	2,108,819	130,124	5.8
New York	7,268,894	6,912,835	356,059	4.9	5,997,853	5,782,983	214,870	3.6
Ohio	4,157,545	4,146,570	10,975	0.3	3,672,316	3,730,864	58,548*	1.6*
Pennsylvania	6,302,115	6,233,137	68,978	1.1	5,258,014	5,043,831	214,183	4.1
United States	75,693,734	75,088,717	605,017	0.8	62,622,250	61,753,195	869,055	1.4

^{*}Estimates too high

In order to compare the school censuses of Philadelphia, for the years 1901 to 1908, with the national census, it will be necessary to accept or make estimates for these years, based on the national census for 1900. In order to prove the correctness of these estimates, the censuses of seven cities, four states and the United States have been estimated for 1890 and 1900. To estimate the population of a city or state for 1900, the difference between the censuses of said city or state for 1890 and 1880 was added to the 1890 census. This number has been recorded in Table XI in the column headed "estimated census." In another column of the table the national census for 1900 has been given for the same city or state. In the same way estimates were made for 1890. The difference between the national and estimated censuses has been shown in the table. The cities have been chosen largely on the basis of their size. Older cities have been chosen because they generally show less fluctation in

the per cent of increase in population. This was considered legitimate from the fact that Philadelphia is in this class.

Table XI shows clearly that the difference between the national and estimated censuses is small in the case of most of the cities and states. The estimate is more often too low than too high. In Philadelphia and in Pennsylvania the estimates are lower than the actual censuses for both years compared. Since the per cent of difference is not great for either and nearly the same for the two years compared, the estimates below for the years 1901 to 1908 must be considered almost correct. If there is any variation from the actual numbers, which the census for 1910 will show, the comparisons just made would favor the assumption that the estimates are too low. If the estimates are too low, the comparisons between the school and estimated censuses will be more favorable to the former in Table XII.

TABLE XII.—COMPARISONS OF THE SCHOOL AND ESTIMATED NATIONAL CENSUSES OF PHILADELPHIA.

Year	School census	Estimated from	Per cent for	Differ	encc
rear	national cer	national census	estimate	Amount	Per cent
1901	208,570	235,988	17.90	27,418	11.6
1902	204,423	240,270	17.89	35,847	14.9
1903	212,308	244,547	17.88	32,239	13.2
1904	217,935	248,820	17.87	30,885	12.4
1905	223,591	253,087	17.86	29,496	11.7
1906	227,370	257,350	17.85	29,980	11.6
1907	- 233,084	261,608	17.84	28,524	10.9
1908	236,838	265,860	17.83	29,022	10.9

In Table XII the school census has been compared with the estimated national census for Philadelphia, for the age period 6 to 16 years, for the years 1901 to 1908. In estimating the relative number of children 6 to 16 years, due allowance has been made for a decrease in the number of children, which was found to be 0.1 per cent for the period from 1890 to 1900. This makes a decrease of 0.01 per cent a year. Column 4 of Table XII shows this decrease in the per cents. This per cent of decrease is very small and changes the estimates very little. It has been taken into account, however, in order to make the comparisons as exact as possible and just for the school census.

The school census for 1902 is less than that for 1901, which is explained in the reports as due to a difference in the time of the year when the census was taken. This made it more difficult to en-

roll the full number in 1902. Possibly similar difficulties are encountered at other times, which may, in part, account for the difference between the school and estimated censuses of Table XII. The increase in the school census since 1903 has been almost in proportion to the estimated increase in the population of the City. But, if the estimated census is found to be too low, when a comparison can be made with the next national census, the school census will be proved to be less accurate for each year that it is taken, unless the yearly gain is greatly increased. In Table XII the per cents of difference are based on the estimated and not the school census. These per cents do not vary much during the years compared, excluding 1902.

TABLE XIII.—COMPARISONS OF SCHOOL AND ESTIMATED NATIONAL CENSUSES.

City	Year	Age Period	School census	Estimated from national census	is below n	hool census ational cen-
					Number	Per cent
Buffalo Boston Cleveland Harrisburg		5-18 years 5-15 " 6-21 " 6-21 "	84,530 104,150 125,368 8,595	108,556 104,443 135,941 10,450	24,026 293 10,573 1,855	22.1 0.3 7.8 17.8

In Table XIII comparisons have been made between the school and estimated censuses for four cities, for the years given in the second column of the table. The school census was obtained from the published reports of the respective cities, for the years compared. The comparison for Boston is of interest. The difference between the school and estimated census is only 0.3 per cent. However, if the estimated census is based on the state census of 1905, the difference between the school and estimated census is 4.9 per cent. In the case of Buffalo the estimate based on the state census for 1905 is lower than the estimate based on the national census.

Table XIII only emphasizes the fact that there is difficulty in obtaining an accurate school census. The problem concerns many cities. The comparisons in this chapter between school and national censuses, for the same age periods, have been made to show the approximate amount of difference between the two censuses. Every means has been employed to make fair and accurate comparisons. All influences that might modify the results, however small, have been taken into account. The above comparisons seem to give rather conclusive evidence that the school census for Philadelphia is too low.

The great variation in Table VII can be explained in no other way than from the fact that, as the children approach the age to go to work, there is a tendency to give false reports to the attendance officers when taking the census, escape enrollment in the census or the proper effort is not made to make a complete census. While Table XII may not give the exact amount that the school census lacks of the whole number, it can be taken as approximately correct. It does show, however, the need of a better organized and more efficient system for taking the school census.

CHAPTER V.

Attendance Records.—Investigation of the Enforcement of the Compulsory Attendance Law in the Schools

OF PHILADELPHIA.

An investigation was made of the cards used to report absentees to the attendance officers, to ascertain the number of times each one was reported, the period of each report and the character of the reasons recorded by the attendance officers for the absences. All the attendance cards of several schools were examined. These schools were considered representative of the conditions existing in Philadelphia, so that the results of this investigation show how accurately these records are kept in the schools and how the compulsory attendance law is respected by the teachers in reporting absentees. work was frought with difficulties because of the negligent manner often employed in recording the data found on the cards. Doubtless the data were intelligible to those who made the entries, yet the cards were not open to easy and definite investigation. By a process of comparisons of the various facts recorded on the cards, the statistics obtained and shown in the following tables, are accurate. The special difficulties of this investigation will be noted under the tables below, which give the statistics for which the data were not easily obtainable. This investigation was made in February, 1909, immediately after the semi-annual promotions. The statistics cover a period of one year, from February 1st, 1908 to February 1st, 1909.

In Table XIV is given the total enrollment of all the schools investigated. For the purpose of further comparisons, the statistics for the boys and the girls are given separately.

TABLE XIV. —TOTAL ENROLLMENT OF SCHOOLS INVESTIGATED, BY SEX, GRADE AND AGE.

					воу	S							(GIR	LS			
AGE	First	Second	Third	Fourth	Firth	Sixth	Seventh	Eighth	Total	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Total
5 6 7 8 9 10 11 12 13 14 15 16 17	3 50 36 19 1	2 31 34 22 6 5 1 3	3 26 53 31 28 14 6 1	1 33 45 34 37 17 9	1 1 32 38 42 30 19 2	7 28 46 45 12 4 2	3 24 31 27 9 2	3 14 28 12 8 2	3 52 70 81 110 121 136 167 146 96 30 12 4	9 47 39 24 2 2	2 23 35 36 15 6 4	2 41 67 42 26 13 7 3	2 26 38 54 34 24 7 1 1	2 32 59 57 31 13 3 1	4 30 44 33 28 12 2	3 29 39 23 13 6 4	1 1 15 22 11 6	11 70 76 103 112 124 177 178 149 96 40 16 5
Total	109	104	164	177	165	145	97	67	1028	123	121	201	188	198	153	117	56	1157

TABLE XV.—NUMBER REPORTED TO THE ATTENDANCE OFFICERS IN SCHOOLS INVESTIGATED, BY SEX, GRADE AND AGE.

					BOY	S								GIR	LS			
AGE	First	Second	Third	Fourth	Firth	Sixth	Seventh	Eighth	Total	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Total
8 9 10 11 12 13 14 15 16	1	2 7 1 3	2 9 5 11 2 2	3 3 14 10 1	2 10 9 7 1	1 1 18 17 5 3 1	1 7 5 1	1 1	5 16 12 28 44 46 19 8	3	5 5 5	3 6 6 7 3 4	1 5 10 12 6 2	3 9 19 19 4 2 1	4 11 19 7 5 2	4 5 4 2	1	11 12 20 30 49 54 17 9
Total	1	14	32	32	38	46	14	2	179	4	15	29	36	57	48	15	2	206

In Table XV is shown the sex, grade and age of the pupils reported to the attendance officers from February 1st, 1908 to February 1st, 1909, for the schools investigated. The table shows that the number reported increased from the first to the sixth grade in the case of the boys and to the fifth grade in the case of the girls. Then there was a large yearly decrease to the end of the eigth grade. Of course, some were reported in the grade below the one in which they were enrolled when the investigation was conducted. This was due to the fact that the records were made from the cards after the semi-annual promotions. It was not possible to trace each pupil's record to the grade where the absence or absences occurred. The column headed totals shows how many boys and girls reported were of a certain age. The number reported increased from the eighth to the thirteenth year. Then there was a large annual decrease to the end of the compulsory school age. The boys and girls who have been recorded in the table as sixteen years of age, were reported before they had reached the compulsory age limit. Their record was inciuded because the absences for which they were reported occurred during the year for which the investigation was made and before they had reached their sixteenth birthday. The difference between the number of boys and girls, reported at each age period, is very small. The per cent of the whole number of boys and girls reported shows almost no difference. 17.4 per cent of the whole number of the boys and 17.8 per cent of the whole number of the girls, in the schools investigated, were reported to the attendance officers. It was not possible, however, to determine exactly what per cent of the pupils were reported in one year. This was due to the fact that the attendance cards of those who have quit school or moved to another district or city were withdrawn from the teachers' records or were supposed to be withdrawn. In a number of cases, however, these cards were still in the possession of the teachers under whom these children had been in school. In order to avoid any difficulty from including the record of children not in school, the attendance cards were compared with the enrollment cards. In some cases the grade of the children was thus determined. This comparison made the age records more nearly accurate. Sometimes the age record on the attendance and enrollment cards did not agree. The latter was always accepted as correct, especially when it showed a corrected age which differed from

the first recorded age in the year and occasionally in the month and day.

Table XVI shows the number of days for which the pupils were reported each time, by sex and grade. This table shows how many reports in each grade were for each of the number of days given in column 1. The total number of reports for any period of days is given in the last column under totals. Since the compulsory attendance law requires that each child who has been absent three days or their equivalent, without a lawful excuse, be reported to the attendance officers, especial attention was paid to the two and one-half and three and one-half days. When the period of absence was any other day plus a half day, the half day was counted as a whole day in order not to burden the table with extra details. This has not made the table less valuable, since the aim has been to show that the period for which absences are reported is not always three days or their equivalent, as the law of compulsory attendance requires.

Difficulty was encounted in determining the number of days for which children were reported each time, due to the way in which the data were recorded. Sometimes only the two days which gave the limits of the period of absence were recorded. Some cards showed a separation of the days reported by a dash, and when this was used for two days, it was necessary to study the teacher's method of recording dates before deciding the length of the period reported. All absences extending over nine days were classed under miscellaneous. These generally represented periods of absence due to sickness. School days only were counted in determining the length of the absences.

This table shows that there is no uniform rule followed in reporting children who are absent. No reason has been found to satisfactorily explain the great variation in number of days for which absences are reported. It certainly shows a disregard for the compulsory attendance law or ignorance of its demands. The manner in which the record of days absent is kept on the attendance cards lends weight to the argument that teachers are negligent in performing their part in the enforcement of the compulsory attendance law. There is a possible explanation, however, of the periods under three days. In many cases this may represent a second report for the same period of absence. If the day recorded on the card, which represented the first day absent for which the report was made, was the next

TABLE XVI. —NUMBER OF DAYS FOR WHICH PUPILS WERE REPORTED EACH TIME, BY SEX AND GRADE.

				F	OYS				1				G	IRL	S			
					011											1		
DAYS	First	Second	Third	Fourth	Firth	Sixth	Seventh	Eighth	Total	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Total
1 2 2 ½ 3		1 19 23	1 13 16	11 14 5 18	8 11 2 18	10 10 3 18	1 3 1 5		32 70 11 98	1	1 16 10	1 10 13	1 17 3 15	1 17 3 23	12 8 1 20	5	1 3	16 74 8 89
3½ 4 5		17	9	1 18	22	1 6 13 13	3 3 3	1	4 75 68 34	1 1 2	9 10 2	16 22 3	14 19 4	3 17 22 17	9 13	4 5 3	1	4 71 93 35
6 7 8 9		13 2 2 1	5 5 2 1	12 3 4 3 1	5 4 3	1 3	2 2	1	22 13 8	1	2 5 2	3	6 1 3	7 3 4	13 5 7 5 3	2 2	1	32 14 12
Miscel- laneous	1	3	4	13	10	17	2		50	1	6	11	12	22	14	3		69

TABLE XVII.—NUMBER OF TIMES EACH CHILD WAS REPORTED, BY SEX AND GRADE.

				В	OYS								GI	RLS				
TIMES	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Total	First	Second	Third	Fourth	Fifth	Sixth	Seventh	Eighth	Total
1 2	1	3	17	11	19	26 9	10	2	89	2	7 2	11 10	12 10	26 12	27	10	1	95 46
3		1 2	3	2	5	3	2		16 12	1	1	4	5 4	5	3 4	2		21 14
5			2	1	1	2	1		7			1	2	4	4	1	1	12
6		2	1	2	2	1	1		6		2		1	3	1	1		8
8		2		1	~				3		1			2				3
10-15		3	1	1	2	1			7		2	3	1					5

school day following the last day reported in the previous report for absence, the conclusion can be made that the first investigation had failed to yield the desired result. If the first or only day recorded in this second report is two or more school days after the last day reported in the previous record of days absent, there are two possible solutions for a one or two days' report. The children may not have returned after the previous investigation. In making a second report of the same period, the teacher may have considered it sufficient to record only the day on which the second report was made because of the fact that the limit of three days had been reached. The attendance officer was to assume from this that the child did not return after the previous investigation. On the other hand, it may be a new report. The case was troublesome, so the teacher decided to keep close watch on the child thus reported, and, if possible, keep it in school. In making Table XVI, however, a second report for the same period of absence was always considered as a separate report so that this would not account for the periods above three days. This plan has been followed because it was not always possible to decide whether it was a new or a second report of the same period of absence. The fact that suggestions only can be made to explain the periods reported more or less than three days, lends weight to the argument that the records are not always properly and accurately kept on the attendance cards. Two cases will be given to illustrate the variation of days for which children are reported to the attendance officers. A boy eleven years old, in the second grade, was reported 15 times in one year. The sum of the days for which he was reported was sixty. This is an average of four days to a report. 12 times the attendance officer reported him as a truant. In another school, a girl fourteen years old, in the sixth grade, was reported II times in sixteen months. She was reported absent twelve and one half days. This is an average of only a fraction over a day for each report. A number of the reports were for a half day.

The difficulty in explaining the above variations in the periods for which absences are reported has been increased by the fact that the teachers generally do not record on the attendance cards, in the space provided, the time of return of those reported to the attendance officers. The only way to determine from the attendance cards whether those reported have returned, is by means of the next report to the attendance officers. If the next report immediately follows the

previous one, it may be assumed that the child did not return after the former investigation. If there is no immediate report of absence, the child is supposed to have returned to school after the attendance officer's visit to its home. The time of return of a reported child, however, should be recorded by the teacher in the space provided on the attendance card. This would be useful information to the attendance officer in making further investigations of the same child. It would show him how promptly the parents of the child had placed it in school, after promising that it would return. The absence of the record of the return of reported children made it impossible to determine how promptly children return after the attendance officers have visited their homes to find out the cause of their absence from school. This information would be interesting and would also show, in part, the efficiency of the bureau that has charge of enforcing the compulsory attendance law or its ability or lack of ability to deal with this part of the problem that is confronting the bureau for a solution. The date of return, however, was recorded on some of the cards, but the smallness of the number and the doubt as to their accuracy would make the statistics obtained from such an investigation of such a character that they would be hardly representative of the conditions in the City or show the average time of return of those reported, and so would be misleading in any conclusions that might be drawn from them.

Table XVI shows that there is not much difference between the boys and girls in the number of times reported. The boys were reported 485 times and the girls 517 times. The girls, however, surpass the boys in the higher number of days for which they were reported.

In Table XVII is given the number of times each one was reported, by sex and grade. Since this investigation was limited to the reports of one year, difficulty was encountered in determining how many of the reported absences on the attendance cards were for the period February 1st, 1908 to February 1st, 1909. 3-26 in the column headed "Date Reported" on the attendance cards could stand for March 26th, 1908, or March 26th, 1907, or even a year or more before the latter date. By comparing the date and grade, errors were eliminated, and a due degree of accuracy can be claimed for the table.

The table shows that almost one-half of the pupils reported to the attendance officers were reported only once during the year investigated, and almost three-fourths are within the limits of two reports. There are still some difficult cases that claim the attention of the attendance officers, as can easily be seen from the table. There is not much difference between the boys and the girls in the number of times for which they were reported during the year. There seems to be, judging from the above tables in this chapter, the same difficulty in keeping the girls in school as the boys. Taking into consideration the entire number of boys and girls in the schools investigated, their separate reports have been about equal in the per cents based on the original numbers.

Table XVIII shows the reasons for absences as recorded by the attendance officers. The reasons have been classed under general heads. The statistics of the boys and the girls have not been recorded separately. A few excuses, which could not be placed in any of the general classes in the table, have been listed under miscellaneous. This class contains also a few excuses that could not be definitely listed on account of the impossibility of deciphering the illegible writing. Sickness of the children or of members of their families account for over one-third of the reasons for absenteeism. The class marked "No investigation" needs explanation. Children were reported to the attendance officers, but in the space on the attendance cards provided for a report of the results of the investigation, no reasons were recorded. This class contains almost onefifth of the cases reported and varied from eight to twenty-five per cent of all the cases reported, in the schools where this investigation was made. It hardly seems probable that a careful attendance officer would fail to record the results of his investigation. No direct statement was obtained to explain the failure to record reasons for absence in the proper place on the attendance cards, but the requirements of the law lead to the conclusion that "No investigation" explains the lack of records. The "No reason" class represents the cases where the attendance officers recorded no reasons for the absences but stated that action was being taken to place the children in school. It seemed advisable to make a separate list of the reports where there were records of action taken to place in school the children reported. In some cases a preliminary notice was sent when the reason recorded on the cards was sickness. Evidently the attendance officers had cause to doubt the excuses given to explain the reasons for the absences of the children under investigation. All the

TABLE XVIII. —REASONS GIVEN FOR THE ABSENCE OF THOSE REPORTED
TO THE ATTENDANCE OFFICERS, BY GRADE.

EXCUSES	First	Second	Third	Fourth	Firth	Sixth	Seventh	Eighth	Total	Per cent
Sickness	2	20 11 9 2 23 3 3 24 7 32 8	53 13 7 2 19 4 12 6 9 27 4	52 7 20 8 1 6 10 9 27 48 10	74 31 4 4 9 18 11 7 30 31 18	68 13 9 11 2 12 6 7 17 43 8	13 7 5 4 5 3 5 12 2	1 1 1	290 83 55 31 54 48 47 54 96 193 51	28.94 8.28 5.49 3.10 5.39 4.79 4.69 5.39 9.58 19.26 5.09
Totals	8	142	156	198	237	196	56	9	1002	100.00
Action taken Reported to Office Preliminary notice Interviewed Reported to charity		1 11 2 2	1 6 2	4 3 5	6 17 2	1 7 2	3 1	1	13 47 15 2	1.30 4.69 1.49 0.20
Totals	0	16	9	12	25	10	4	1	77	7.68

excuses classed under "No reasons" were inleuded under the classes given in the list headed "Action taken". This list has made it possible to record double reasons, when found, and yet not make unjust comparisons between the different classes of reasons for absences. Truancy was recorded as a reason for absence in very few cases. Since action was taken in all the cases classed under "No reasons," these can be added to the truancy class. This would make a total of over ten per cent of all reported classed as truants.

It is not possible to determine from the attendance cards, to any great extent, the efficiency of the attendance officers. The number of cases where no reasons are recorded to show that investigations were made is an argument against their efficiency. The character of the excuses accepted by them in making their investigations, in part, determines their efficiency, but principals and teachers only can decide the extent of their efficiency in this matter. The manner in which the attendance officers conduct their investigations has an influence on the children's return. It was not possible to test this.

In Table XIX is given a number of troublesome cases that seemed to be of interest. The most important excuses have been given to show the character of the reasons given to the attendance officers.

TABLE XIX.—A LIST OF TROUBLESOME CASES IN THE SCHOOLS INVESTI-GATED.

_				BOYS					GIRLS
Grade	Age	Times	Period Months	Most Important Excuses	Grade	Age	Times	Period Months	Most Imprtant Excuses
2	9	12	15	Sickness, charity need-	2	8	13	6	Sickness
2	9	8	12	Sickness, sent home	2	9	15	12	No shoes, no report, don't know
2	9	8	12	Sickness, truant, no	2	9	8	12	Sickness
2	9	15	15	Sickness, charity,	2	10	7	6	Truant
2	11	15	12	Truant (12 times), no- tice and prosecuted	3	9	9	12	Sick, out, no report
3	15 15		12 12	Needed, truant Sick, sent to special	3 3	10 11	11 2		Sickness, no report Moved, preliminary
4	11	10	30	school Sickness, no response	3	12	24	24	notice Sickness, no report, preliminary notice
4	11	16	16	No report (10 times)	3	13	10	4	Mother sick, charity
5	11	7	12	Truant	4	10	4	6	needed, notice Sickness, preliminary notice
5	11	2		Truant	4	12	10		Sickness
5 5 5	12	3		Truant Sickness, reported to	5	11 12	8	12	Sickness in family
Э	14	~ 1	14	office	3	14	0	14	
5	13	12	12	Truant	5	12	8	12	Sickness, moved, no good excuse
6	12	2	12	Truant, preliminary	5	13	6	12	Charity needed, pre- liminary notice
6	13	13	16	Sickness	6	13	12	24	Charity needed, sick- ness
6	15	2	12	Truant	6	14	3	12	Truant
6	15	3		Truant	6	14	11		Toothache, grippe, removed, truant
6	12	2	12	Truant, Preliminary	7	12	13	12	Mother sick

To these statistics have been added the records of a few children who were not behind their respective classes in age. In these cases the reasons given are generally sickness, although a few cases of truancy were reported among these. Attention was paid to the truant class although all the truants have not been included in this table as it was not intended to make it complete but only representative of the difficulties of enforcing the compulsory attendance law.

The results of the investigation show that the records on the attendance cards are not carefully kept. Important data are not

recorded. Investigations are not made in all the cases reported to the attendance officers. The law is not fully enforced in the case of the number of days absence for which children should be reported. The attendance cards are not always transferred with the pupils. Attendance cards of those who have left school are often in the posa new attendance card was made out each year or every few years, session of the teachers. It was not possible to determine whether or the same card used for reporting until the child left school or the card was full. The cards seemed to reveal the fact that all the plans suggested were followed. In some cases there were two or three cards for the same child. Occasionally these cards were held by different teachers. The final destination of the cards could not be fully determined. The Bureau of Compulsory Education is under the impression that the attendance cards of all who have left school are sent to its office. Investigations favor the conclusion that all the attendance cards are not sent to the office of the Bureau.

The attendance officers report troublesome cases to the Bureau of Compulsory Education. The past records of children thus reported are furnished. Investigations are made by the Bureau. The record of the trouble and its disposition is placed on the enrollment card of each child investigated, which cards are in the office of the Bureau of Compulsory Education. If the reported age of a child is doubted, the true age is determined from the vital statistics of the city, the passport or baptismal certificate.

Arrangements had been made to verify, in the same way, the age of those applying for employment affidavits. When the law of 1905, under which employment affidavits were issued, was declared unconstitutional, this plan could not be systematically carried out. Under the present law, a notary or magistrate can grant an employment affidavit to any child whose parents declare, under oath, that the child is fourteen years old. This permits the child to obtain an employment affidavit without the knowledge of the principal of the school where he was last in attendance. If a notary or magistrate issues an employment affidavit to a child enrolled in school, the principal of the school reports the case to the Bureau of Compulsory Education, when the school record shows that the child is not fourteen years old. The Bureau verifies the age by means of the vital statistics of the city, passport or baptismal certificate. If the child is not fourteen years old, as shown by this verification, he is reported to the

attendance officer who tries to find him and replace him in school. The Bureau of Compulsory Education requires a statement from the principal of the school where the child attends, before granting an employment affidavit. The age is verified, and, if the child is found to be fourteen years old, the employment affidavit is granted. It can readily be seen that the present method of granting employment affidavits has increased the difficulties attendant upon the enforcement of the compulsory attendance law in Philadelphia. It seems no more than reasonable that the same bureau which is charged with placing all the children in school and keeping them in regular daily attendance, so far as possible, should have the authority entirely to grant all the permissions to those who ask to leave school as soon as the law permits them.

An investigation was made during the fall months of 1908 to find why children leave the public schools. This investigation covered twenty schools of Philadelphia. The reasons have been summarized and are given in Table XX, classified according to age at time of withdrawal.

Possibly most of the reasons for leaving the public schools, recorded in Table XX, are legitimate. The table does show the difficulties encountered in enforcing the law of compulsory attendance. The number of children that left to enter the parochial school is very

TABLE XX.—REASON FOR CHILDREN LEAVING THE SCHOOLS, CLASSI-FIED ACCORDING TO AGE AT TIME OF WITHDRAWAL*

REASONS	Five	Six	Seven	Eight	Nine	Ten	Eleven	Twelve	Thirteen	Fourteen	Fifteen	Sixteen	Total
To parochial schools Moved to unknown address Moved out of city Moved	2	1 6 3 4	9 7 5 7	9 3 11 7	.13 9 8 4	7 8 13 2	6 1 4 1	7 4 9 1	9 3 9 1	3 2	1 2	1	61 42 68 31
Absent 7 weeks — name taken from roll		2 7 2 5	1 1 3	1 1 1	1 1	ì	3	3 1 2 1	3 1 17 2	2 52 7	1 11 1	2 1	17 8 8 84 12 10
dropped	1	1 3 6	1 5	1 4 3	1 2	1 1	1 5	3 4	3 2	1 3	1	1	12 9 33

^{*}The data in this table was furnished by a civic society of Philadelphia.

large. This varies for the different schools investigated. A large number go to work as soon as they reach the age of fourteen. Attention should be called to the nineteen, under the work class, who have not yet reached the age limit which permits them to leave school and go to work. The moving of children from one district to another or out of the city presents difficulties for the attendance officers. In several cases the names of children were dropped for non-attendance. In the case of those dropped temporarily, it was often due to a legitimate reason for absence, as, for example, continued illness of the child. Some names were dropped entirely. It has not been possible to determine how many names are dropped from the school rolls each year and the reasons for dropping them. Table XX does not throw much light on the efforts made to replace the children in the public schools, or how far the attendance officers go in investigating the location of the children who leave the schools.

CHAPTER VI.

Conclusion.

This investigation has been carried on with two ends in view; first, to see whether there has been an increase in the school enrollment and average attendance since the passage of the compulsory attendance law; second, to determine, so far as possible, what is being done to efficiently enforce the law of compulsory attendance.

The first part of the investigation has been prefaced by a study of the influence of compulsory attendance laws on the enrollment and average attendance of the United States, its divisions and Pennsylvania. Every effort has been made to account for influences that may have a marked effect on enrollment and attendance. These influences have been noted and considered in making the comparisons and drawing conclusions therefrom. The results of the comparisons, however, are somewhat disappointing, in view of the fact that the number of states under compulsory attendance laws is increasing. This is no argument that the laws of compulsory attendance are ineffective. Three explanations may be given for the decrease in school enrollment and average attendance during the years 1900 to 1907. This period showed a marked decrease for the United States, all its divisions, except the Western, Pennsylvania and Philadelphia. First, there may

be a less per cent of the population of school age, due to a lower birth rate and adult immigration. Investigation and comparisons of the last three census years favor the conclusion that the birth rate is steadily decreasing. The national census for 1910, however, will decide the question as to the influence of a lower birth rate and adult immigration on the school enrollment and average attendance for the period 1900 to 1910. Second, changed conditions may have their influences. Changes in the environment of children during the first part of the nineteenth century made necessary the passage of the truant law in 1850, and the compulsory attendance law in 1852, in Massachusetts. In fact, all the compulsory attendance laws may be said to be due to the changed environment of children. The former methods and laws for placing children in school and keeping them in regular daily attendance, so far as possible, gradually became ineffective. There is no way, however, to determine what the school enrollment and average attendance would now be for any state or city under compulsory attendance laws, if such laws were not in force in said city or state. But a knowledge of the present condition of children, especially in the cities, and the commercial instinct that very often dominates them and their parents give some idea as to what the result would be in a city or state if the laws of compulsory attendance would be disannulled. No just comparisons can be made between cities or states with compulsory attendance laws and those without such laws, as the conditions would not be the same. Third, possibly the compulsory attendance laws are not efficiently and effectively efforced. This leads to the second part of the investigation where the test has been made to determine, so far as possible, whether the compulsory attendance law has been efficiently executed in Philadelphia.

Four things seem necessary to enforce the compulsroy attendance law; adequate school accommodations, a school census which enrolls all the childern in the city or district, complete and accurate attendance records, and an efficiently organized bureau for enforcing the law of compulsory attendance.

While the number of children to a teacher is decreasing for Philadelphia, as shown in Chapter III, the reports of children on half-time indicate that the present accommodations are not sufficient for all the children who apply for admission to the public schools or are brought in under the law. The further important question as to whether school accommodations are adequate to the population of the respective districts was not touched upon by the investigation.

The school census was considered, at length, in Chapter IV. The comparisons in that chapter seem to show conclusively that the school census of Philadelphia is too low. Either the children have not been found by the attendance officers in taking the census, or have escaped enrollment in the census by means of a false statement as to age. If a child or his parents inform the attendance officer that he is sixteen when he is only fourteen, or fourteen so that he is permitted to go to work, and informs the attendance officer that he has obtained an employment affidavit, when he is only twelve or thirteen, there is no way to check this false statement by the census. The school enrollments must be used as a check in such cases. This requires that lists be made from the census by the Bureau of Compulsory Education. These lists must be sent to the schools and there compared with the enrollments. In this way there is a check placed on giving a false report of age to the attendance officers making the census, or, at least, such a false statement is detected and corrected so that the child or children will not benefit from the statement by non-attendance at school. This statement is made in the light of the great difference between the school and national censuses for Philadelphia, for 1900. as shown in Chapter IV, which increases as the work age is reached, where the difference is very great. If the Bureau of Compulsory Education requires parents to declare on oath the age of their child to obtain an employment affidavit, and then verify this age by the vital statistics of the city, passport or baptismal certificate, caution should also be used in accepting the report of the age of children in making the census. This is especially needful if there is to be no check on the census further than comparing it with itself.

The present method of comparing the school census made by the attendance officers with the school enrollment determined also by the same officers in making the census seems to open a fruitful field for deception by the parents and children and the eluding of the compulsory attendance law. This comparison is useful but should not be the only one used to check the census. In the light of experience at places where an effort has been made to test the accuracy of the school census, as described above in Chapter IV, checking and counterchecking would be suggested to test the school census of Philadelphia, although the checking hardly needs to be mentioned since the law

requires that to be done. The size of the city will not make the problem impossible or give added duties to the Bureau of Compulsory Education, that will seriously interfere with its present work. work be properly organized and divided, it can be done expeditiously and at the cost of little extra labor to anyone. This method of checking and counter-checking would compel the Bureau of Compulsory Education to obey the law requiring the making out of lists, from the school census, showing the names of all the children in each school district. These lists should be sent to the respective schools and a comparsion made between the lists and school enrollments, under the supervision of the principals. The names on the lists, which were found not to be on the enrollments, should then be added to the latter. These lists have been made out and compared with the school enrollments, in former years. The law requires that this be done and any failure to do it, as was the case in 1908, is contrary to the demands of the law. In making comparisons between the census lists and school enrollments, a check mark should be placed on the enrollment cards. Enrollment cards could be made with spaces for such a check, yearly, se that the check mark would not mutilate or disfigure the enrollment cards or interfere with a similar checking in other years. After the first comparison has been made and the names added to the school enrollments that were found on the lists and not on the school enrollments, the school enrollment cards would reveal how many names, by the absence of the check mark suggested above, were missed in making the census of the respective school districts, of the children who came to school without the aid of the attendance officers' investi-The names, thus found, should then be reported to the Bureau of Compulsory Education. After all eliminations had been made, if there were any due to the fact that some children had moved from one school district to another between the time of taking the census and making the comparisons, the remaining names could be added to the enrollment cards in the office of the Bureau of Compulsory Education. Of course, this plan would not furnish the names of those missed in making the census, who did not enroll in school in September of the year in which this comparison was made. If these names could also be obtained, the carefulness and integrity of the attendance officers in taking or making the census, could, to a great extent, be determined.

In Chapter V the accuracy and completeness or lack of com-

pleteness of the attendance records have been considered. Sufficient evidence has been given to show that the compulsory attendance records of the schools are not accurately kept. The cards contain sufficient columns to record all the necessary data resulting from a child's absence and the attendance officer's investigation of the cause for such absence. There should be, however, more care exercised in recording the data. No other records resulting from the enforcement of the compulsory attendance laws were investigated, except the printed reports of the Bureau of Compulsory Education. These reports, four in number, give scarcely any data to show what has been done to enforce the compulsory attendance law. The attendance officers are supposed to make regular reports to the Bureau of Compulsory Education, which give an account of all the work done by them. The printed reports of the Bureau, however, give very little information about the work of the attendance officers. This is especially noticeable when a comparison is made between the reports of the Bureau of Compulsory Education of Philadelphia and similar reports of other cities where an effort has been made to give to the public as full an account as possible of the working of the compulsory attendance laws what is being accomplished through them.

The fact that no satisfactory evidence could be obtained as to the final destination of all the attendance cards adds weight to the statement that the records of the enforcement of the compulsory attendance law are not accurately and efficiently kept.

It was also shown in Chapter V that the compulsory attendance law which requires that a child who has been absent for three days or their equivalent be reported to the attendance officer, was not always obeyed by the teachers in reporting children who had been absent. Two solutions might be given to explain this. Either the teachers are ignorant of the demands of the compulsory attendance law with respect to the period for which children who have been absent should be reported, and how to determine the length of the period, or they have no regard for the requirements of the law and prefer their own system of reporting absentees.

It is not possible to decide whether the excuses recorded in Table XVIII were lawful or not. The immediate return to school of a child reported absent is the end sought. The attendance officers must realize the fact that their efficiency is determined largely by the number of children they place in school, both of those reported to

them as absent and those they find on the streets of their respective districts, who are of the compulsory school age. Excuses are useful if they help to place the children in school. The amount and character of the instruction, exclusive of any printed regulations, that is given to the attendance officers by the Bureau of Compulsory Education, has not been determined. From some of the reports received from principals and judging from the reports on the attendance cards, it would be recommended that the Bureau give instructions to the attendance officers in order that they may properly and efficiently perform their part in the enforcement of the compulsory attendance law and not degrade their position to one of obtaining reasons for absences.

It has been shown that the compulsory attendance law does not properly provide for the granting of employment affidavits. If the Bureau of Compulsory Education is charged with the responsibility of placing in school, and keeping there in regular daily attendance, all the children between 8 and 14 years and those not employed between 14 and 16 years, it should be given the power to grant all the employment affidavits.

Whether the Bureau of Complsory Education has an efficiently organized system for enforcing the compulsory attendance law can, in part, be decided from the facts given above. The lack of an accurate school census and incomplete and carelessly kept attendance records seem to show that the present organization of the bureau for enforcing the compulsory attendance law is not sufficient or complete enough to meet the demands made upon it or properly regulate or use the forces that must co-operate with it. The blanks used in making the different reports used in enforcing the law, so far as they have been examined, seem to be adequate for the purpose. The lack of uniformity in the school records which are used in enforcing the compulsory attendance law, and the carelessly recorded data on the attendance cards have the marks of inefficiency. The cause and responsibility for this state of affairs will not be centered on the Bureau of Compulsory Education entirely since it is not known what authority the Bureau has in making demands of the teachers to furnish the data necessary for the enforcement of the compulsory attendance law, in the way that it may deem most advantageous for such enforcement. The Bureau of Compulsory Education, however, realizes that the records on the attendance cards are not kept as accurately as they should be. It is not known whether any steps have been taken with

a view to correcting this deficiency and incompleteness of the attendance records in the schools.

Inadequacy of records, looseness of organization and disregard of certain provisions of the law have been clearly proved. In the absence of adequate records, the operation of the compulsory attendance law can not be accurately tested. The absence of adequate records is in itself a demonstration of inefficiency and lack of organization. Under such conditions, the law of compulsory attendance can not be efficiently enforced.

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